

# Web and Application Servers on Sun™ x86 Systems

Systems Built for Speed, Scalability, and Security




## Features and Benefits

- Decreased complexity and cost
- Maximum price/performance
- Proven scalability, performance, and manageability
- Increased security against Internet attacks

## Sun Hardware

- Sun Fire™ V20z and V40z servers, featuring the AMD Opteron™ processor
- Sun StorEdge™ storage products, including Sun StorEdge 3310 and 3120 SCSI arrays and the Sun StorEdge 9900 series

## Sun Software

- Sun Solaris™ Operating System
- Sun Java™ System Web Server
- Sun Java™ System Application Server

## Sun Services

- Includes offerings ranging from Next Business Day warranty support to 24/7 mission-critical support and Sun™ software Support Services to help you integrate and deploy your computing infrastructure

## Third-Party Software

- Linux—Sun brings a comprehensive systems approach to Linux. Sun provides Java technology, x86-based hardware, Red Hat Enterprise Linux, and SUSE Linux Enterprise Server, along with Sun's Java Enterprise System and Sun Java™ Desktop System—all supported by Sun services.
- Microsoft Windows 2000, 2003 (WHQL certified, customer provided)

**Rapid and cost-effective deployments of information-processing, transaction-oriented applications are key to helping businesses increase responsiveness, reduce IT complexity, and improve infrastructure agility.**

## Web and Application Servers

Web and application servers are fundamental IT infrastructure elements that process data and transactions, and as such, have a tremendous impact on the scalability and price/performance of the applications they serve. Characterized by factors such as transaction speed and the number of connections they can handle, these workloads place greater demands on your compute infrastructure as your business grows.

As you anticipate more customers entering your e-commerce site or more users accessing your internal databases to run your company's operations, the scalability and performance of your Web and application servers are essential factors to consider.

## Horizontal Scaling for Service Availability and Responsiveness

Horizontal scaling is a method of building an infrastructure using many small, low-cost, industry-standard servers, each running a separate instance of the needed software as a response to increasing demand for Web-based content delivery and application processing. Incremental capacity can be gained in the most cost-effective and simple manner by increasing the number of servers. Availability is accomplished with load-bearing technology; responsiveness results from having the flexibility to add servers quickly. Horizontal scaling allows greater flexibility when, for example, growing a farm of application servers.

Sun offers a comprehensive and flexible solution for deploying Web and application servers and storage capacity, enabling customers to build enterprise applications fast, and at lower cost, without compromising security, scalability, or performance. When delivered on Sun's high-performing AMD Opteron processor systems and Sun storage arrays, Web and application servers can achieve the performance, scalability, and availability required for high-volume, business-critical applications.

## High Return on IT Investment

Leveraging Sun's stewardship of Java and the industry-leading performance and security of the AMD Opteron processor, Sun's x86 systems deliver faster transactions at every price point. That means quicker response to customers and quicker development cycles. In addition, Java—the basis for business application processing as well as the fundamental platform for next-generation Service-Oriented Architecture (SOA) deployment—makes testing and deploying applications easy.

Sun has already demonstrated world-record Web and application server performance on its Sun Fire v20z and v40z servers. Sun leads the industry in continually improving Internet-based applications, and on delivering next-generation SOA architecture — offering new levels of applications and resulting benefits for Internet use that enhance your business. Using the Java platform ensures you adhere to open standards that provide greater flexibility and reduced vendor lock-in. Java and Web services on AMD Opteron processors offer high return on your IT investment.

**Sun's Secure Web Server Solution Overview**

System vulnerabilities and security breaches can cost a business untold transaction and revenue loss. Frequent patches and updates to avoid security problems can raise the Total Cost of Ownership and take administrators away from revenue-generating activity to solve these problems.

The Sun Fire V20z and V40z come with Enhanced Virus Protection built into the AMD Opteron processors. Among x86 offerings today, only AMD Opteron processors include this hardware feature, which protects against Internet attacks that use buffer overflow. This

capability ensures continuous system and service availability for your business, despite the continuing onslaught of Internet attacks.

Sun offers a Secure Web Server specifically for Web-serving needs. Backed by a reference architecture that identifies the topology, equipment, and software needed for network traffic loads and optimal Web-serving configurations, the Secure Web Server can act as a content gateway in front of other Web servers or as its own secure Web-serving platform.

**Financial Services**

For financial services organizations focusing on customer retention and profitability, Sun's AMD Opteron processor systems provide a cost-effective, high-performance solution for compute-intensive transactions, including running Web applications. Sun's powerful x86 platforms deliver industry-leading price/performance, and scale seamlessly as your application demands grow.

**Government**

Sun's AMD Opteron processor systems are ideal for government agencies demanding high availability and flexibility for their Internet and citizen-centric applications.

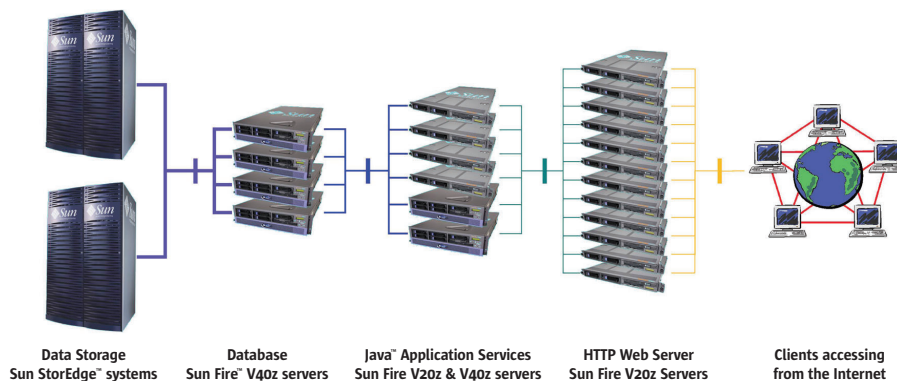
Security and reliability — paramount for many government applications — are delivered through the Solaris operating system running on Sun's high-performing AMD Opteron processor hardware platforms.

**Manufacturing**

Sun's AMD Opteron processor systems act as a foundation all along the value chain of a manufacturing organization. Sun's AMD Opteron processor systems improve engineering collaboration, streamline the supply chain, integrate processes, and accelerate distribution, enabling manufacturing enterprises to achieve their business goals.

**Sun Makes IT Simple**

Sun's leadership in networking technology uses Java to harness the power of the network, offering a solution tailored to individual customer needs. Sun builds a secure, powerful Web environment from the infrastructure up, making your Web and application servers rock-solid and cutting-edge. Sun takes care of security without constant reboots and patches, letting you unleash the power of the system to grow your business.



Java Web Services architecture using Sun Fire servers with AMD Opteron processors

Want to learn more about Sun's x86 systems featuring the AMD Opteron processor? Visit [sun.com/amd](http://sun.com/amd), or talk to your local Sun representative about scheduling a half-day session to learn more.

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